

Appln No. 10/706,024
Amdt date September 7, 2006
Reply to Office action of June 9, 2006

Amendments to the Specification:

Please replace the paragraph beginning at page 5, line 6 with the following amended paragraph.

An electrode lead wire 16 is pulled through the lumen 12 of the tip section 10 and out of the exit ~~hole 14~~ hole 14. The length of the electrode lead wire 16 that extends out of the exit hole 14 is not critical, but is sufficient to allow the electrode lead wire 16 to be wrapped around the shaft of the tip section 10 the desired number of turns. The electrode lead wire 16 may be made of any suitable, preferably non-oxidizing, material and may have any suitable diameter. A preferred electrode lead wire is 0.003 inch ~~Monel~~ MONEL® 400 wire (high tensile strength nickel-copper alloy), which is coated with a nonconductive coating.

Please replace the paragraph beginning at page 5, line 30 with the following amended paragraph.

It is understood that, while heating to facilitate embedding of the wire wraps is preferred, it is not necessary to practice the invention. Moreover, when heating is used, any temperature that softens the plastic material of the shaft of the tip section may be employed. Further, any technique or device that allows heating, particularly localized heating, may be used. With reference to ~~[[FIG. 5]]~~ FIG. 4, a preferred heating device consists of a heating block or rod 18 that has been configured to form a cradle 20 to receive the portion of the tip section adjacent the exit hole 14. The heating block or rod 18 can be heated by any conventional method, e.g., it may be heated by or comprise an electric heating element.

Please replace the paragraph beginning at page 6, line 10 with the following amended paragraph.

With reference to FIG. 5, a ring electrode 22 is provided which has an inner diameter slightly greater than the outer diameter of the tip shaft to allow it to be slipped over the shaft of the catheter tip 10 to a location over the wrapped electrode lead wire 16 and exit hole 14. For

example, if the tip section 10 has an outer diameter of 0.084 inch, a ring electrode having an inner diameter of ~~[[0,085]]~~ 0.085 inch is preferred. The ring electrode may be made of any suitable conductive, preferably non-oxidizing, material. One preferred material is platinum iridium alloy.

Please replace the paragraph beginning at page 7, line 16 with the following amended paragraph.

Once the ring electrode 22 has been positioned directly over the wrapped electrode as shown in Fig. 7, lead wire 16 and exit hole 14, it is swaged to reduce its diameter by means of a rotary swaging tool, e.g., a Fenn Amca International Model AF rotary swager. ~~[[FIG. 9]]~~ FIG. 8 shows in general how rotary swaging works. In the figure, head 26 is fixed. A motorized spindle 28 comprises slots for holding backers 30 and dies 32. The spindle passes the backers 30 over rollers 34 which causes the backers 30 to impact the dies 32 as the spindle 28 rotates. In this arrangement, the backers 30 deliver a blow to the dies 32 which in turn impact the ring electrode 22 that is positioned within the ~~dies 32~~ dies 32 of the rotary swager. When a backer 30 is between two roller positions, centrifugal forces cause it to move radially outwardly making it possible for the associated die 32 to open while the dies 32 are rotating around the ring electrode. The operation continues until the outer diameter of the ring electrode is reduced to about the outer diameter of the shaft of the tip section.

Please replace the paragraph beginning at page 7, line 30 with the following amended paragraph.

The dies 32, which have a length of about 0.75 inch and are flared or tapered over the proximal half of the dies forming a cone-shaped entrance into the space within the dies. The ~~distal~~ distal half of the dies forms a generally cylindrical space having a diameter about equal to the outer diameter to which the ring electrode are swaged, i.e., the outer diameter of the shaft of the tip section. The cone-shaped entrance enables the diameter of the ring electrode to be reduced slowly, thus minimizing the risk of cracking or other damage to the ring electrode. It

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has been found that an angle of from about 2° to about 4° and particularly about 3° on each side is suitable for this purpose.